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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/320,950 | 05/27/1999 | JOHN N. GLOVER | 2797.004 | 5662 |

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BEN D. TOBOR
BRACEWELL & PATTERSON, LLP
711 LOUISIANA
SUITE 2900
HOUSTON, TX 77002

EXAMINER

SORKIN, DAVID L

| ART UNIT | PAPER NUMBER |
|----------|--------------|
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1723

21

DATE MAILED: 05/23/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/320,950

Applicant(s)

GLOVER, JOHN N.

Examiner

David L. Sorkin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 April 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 46-48 and 51-58 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 46-48 and 51-58 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. The amendments filed on 20 February 2002 and 22 April 2002 have been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 46-48 and 51-58 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor, at the time the application was filed, had possession of the claimed invention.

4. In amended claim 46, the limitation "having more than two openings" is recited. While the original claims require "a plurality of openings" the examiner is not aware of anything in the original specification suggesting limiting the scope of the invention to "having more than two openings". To the contrary page 23 lines 10-12 states "it will be apparent to one of ordinary skill in the art that a greater, or smaller, number of openings 88 may be provided". As stated in *Purdue Pharma L. P. v. Faulding Inc.* 56 USPQ2d

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1481 (CA FC 2000) “one skilled in the art, reading the original disclosure, must

‘immediately discern the limitation at issue’ in the claims *Waldemar Link GmbH & Co. v.*

Osteonics Corp., 32 F.3d 556, 558, 31 USPQ2d 1855, 1857 (Fed. Cir. 1994). The court further states:

The case of *In re Ruschig*, 379 F.2d 990, 154 USPQ 118 (CCPA 1967), is instructive here. In that case our predecessor court affirmed the holding of the Patent Office Board of Appeals that one of the claims, adopted for purposes of interference, was not supported by the disclosure. The claim at issue in that case was directed to a single compound. The applicants argued that, although the compound itself was not disclosed, one skilled in the art would find support for the claimed compound in the general disclosure of the genus of compounds to which the claimed compound belonged. The *Ruschig* court rejected that argument, stating that [i]t is an old custom in the woods to mark trails by making blaze marks on the trees. It is of no help in finding a trail or in finding one's way through the woods where the trails have disappeared—or have not yet been made, which is more like the case here—to be confronted simply by a large number of unmarked trees. We are looking for blaze marks which single out particular trees. We see none. *Id.* at 994-95, 154 USPQ at 122. Although this case differs from *Ruschig* in that what was disclosed in *Ruschig* was a genus encompassing potentially half a million compounds, the rationale applies equally to this case, in which the disclosure of the '360 patent discloses a multitude of pharmacokinetic parameters, with no “blaze marks” directing the skilled artisan to the C_{max}/C_{24} ratio or what value that ratio should exceed.

Likewise, the instant disclose did not point out “number of openings”, or what value the number should exceed.

5. Concerning claim 48, it is considered that there is no support for the limitation “a polygonal cross-sectional configuration with a length of 0.5 inches to 3 inches” in the original specification. Applicant argues that the statement in the specification “polygonal cross-sectional configurations used may include sides having lengths of about 1/8 to 3 inches” provides support; however, claim 48 refers to simply “length” not length of a side of a polygonal cross-section, and 0.5 to 3 is not 1/8 to 3.

6. Concerning claim 53, it is considered that there is no support for the limitation “circular cross-sectional configuration and a diameter of 0.5 inches to 3 inches” in the original specification. Applicant argues that the statement in the specification “cross-

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sectional configurations of about 1/4 to 3 inch diameter" provides support; however, 0.5 is not 1/4.

7. Concerning claim 54, it is considered that there is no support for the limitation "square cross-sectional configuration with a width of 0.5 inches to 3 inches" in the original specification. Applicant argues that the statement in the specification "square cross-sectional configurations of about 1/4 to 3 inches" provides support; however, 0.5 is not 1/4.

8. Likewise the ranges of claims 55, 56, 57 and 58 are not supported by the original disclosure.

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 46-49 and 51-58 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear what is intended by the term "trisoid". In the most recent communications, Paper Nos. 17 and 20, applicant apparently withdraws the previous definition of "trisoid", which applicant set advanced in Paper No. 15, and now states "Applicant agrees with the Examiner's reading of the 'Beyond the Ellipse' definition for a trisoid being a curve that results when the total distance from three points is kept constant". However, applicant then sets forth yet another definition stating "The desired shape, for the openings that are called 'trisoids' in the specification, is a triangle with radially rounded edges, so that there are not pointed edges in the openings". This contradicts the 'Beyond the Ellipse' definition, for

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example, because any "triangle" portion would include a line segment (see Fig. 3 of US Pat. No. 5,895,572 for illustration).

Claim Rejections - 35 USC § 103

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 46-48 and 51-58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hung et al. (DE 35 39 195). Note: all page and line numbers refer to the English language translation of DE 35 39 195. Regarding claim 46, Hung ('195) discloses a method of fluid distribution in a chemical reactor comprising the steps of providing a layer of ceramic filter units, at least some of the ceramic filter units having a plurality of elliptical openings (see fig. 3; page 10, lines 5-8); contacting an organic – based feed stream with the layer (see page 7, lines 8-22); and the stream is subdivided as a result of entering the openings (see page 11, lines 19-20) prior to the organic-based feed contacting a catalyst bed in the chemical reactor (see page 21, lines 5-7 and the English language Derwent abstract). While the number of opening is not discloses to be "more than two", applicant expressly admits on page 23, lines 10-12 of the specification that "it will be apparent to one of ordinary skill in the art that a greater, or smaller, number of openings 88 may be provided". See also *St. Regis Paper Co. v. Bemis Co., Inc.* 193 USPQ 8,11 (7th Cir. 1977) and *In re Harza* 124 USPQ 378 (CCPA 1960) regarding the obviousness of duplicating parts. Regarding claim 47, removing

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contaminates from an organic stream and providing the stream to a catalyst bed for further processing are disclosed (see page 21, lines 5-7). Regarding claims 48 and 53-58, while, as pointed out by the applicant, the maximum specific value of an example disclosed by Hung ('195) was 10 mm (0.39 inches), which is outside that claimed range of 0.5 to 3 inches. However, in *Gardner v. TEC, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), *cert. denied*, 469 U.S. 830, 225 USPQ 232 (1984), the Federal Circuit held that, where the only difference between the prior art and the claims was a recitation of relative dimensions, the claimed device was not patentably distinct from the prior art device. See also *In re Rose*, 220 F.2d 459, 105 USPQ 237 (CCPA 1955).

Furthermore, Hung ('195) specifically states that sized may be varied (see page 11, lines 1-7) depending on production method. Therefore, it is considered that it would have been obvious to one of ordinary skill in the art to have optimized the size of the unit according to a production method. Polygonal, circular, square, rectangular and elliptical shapes are disclosed (see pages 6-9). Regarding claim 51, a groove on a peripheral surface is disclosed (see Fig. 3). Regarding claim 52, Hung ('195) states a "rectangle with rounded corners" would be within the scope of the invention (see page 8, final paragraph).

Response to Arguments

13. Applicant attempts to distinguish the instant invention from the prior art by discussing what type of material is removed. However, the instant claims do not require anything be removed (let alone a particular type of substance), only that filter units are "provid[ed]". It is intrinsic that a bed of mm size units such as that of Hung ('195) would

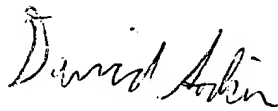
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at least remove solids of a size greater than the gaps therebetween. For example, a golf ball would not flow through a bed of mm size.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David L. Sorkin whose telephone number is 703-308-1121. The examiner can normally be reached on 8:00 -5:30 Mon.-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L. Walker can be reached on 703-308-0457. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



David Sorkin

May 22, 2002



JOHN KIM
PRIMARY EXAMINER
GROUP 1900